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AUTHOR Hirsch, Linda
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ABSTRACT

Two research studies conducted at the bilingual Hostos Community College of the City University of New York suggest that the classroom performance of adult, advanced, and post English-as-a-Second-Language (ESL) students benefits from the students' participation in tutor-led groups that focus on a particular course's content and employ talk and writing as learning aids. The first study of 60 students found significant differences between the mean grades of students participating in the tutor-led groups and the mean grades of a control set of students. In the second, corroborative study of 164 students, the tutored students received higher average grades and were less likely to fail or drop out of a class. The results of these studies demonstrate the importance of writing and talk in the learning process, and, based on qualitative evaluation of the data, it appears that expressive talk is an equal if not greater contributor to the learning process than is writing. The results also raise questions about the effectiveness of the lecture mode as an instructional tool with the ESL population. (JL)

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Are Principles of Writing Across the Curriculum Applicable to ESL Students in Content Courses? Research Findings.

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Submitted by: Dr. Linda Hirsch

Hostos Community College/
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Two research studies were conducted at Hostos Community College, a bilingual community college of the City University of New York, to determine if principles of writing across the curriculum were applicable to ESL students in content courses. The study was based on the realization that while these students may have completed an ESL sequence of study, they are often unable to compete successfully with native speakers of English in subject area courses. Their poor grades in these courses frequently lead to a pronounced sense of failure and a tendency to abandon their studies. While this is a problem of particular significance to Hostos Community College because of its large ESL population, it is also a problem of growing national importance due to the increasing numbers of non-native speakers of English entering the American school system.

To address the difficulties adult ESL students confront in English while studying content disciplines, students were assigned to small groups centered on a particular course such as General Biology, Introduction to Business, Introduction to Social Science, or Early Childhood Education. Under the guidance of a trained tutor, students used talk and writing as learning tools to enable them to increase their comprehension of course material while seeking to improve their oral and written English-language skills.

The project's design was based on research which illustrates the relationship between language and learning. Its approach was the use of student talk and writing in what James Britton has termed the "expressive function." This function is described as language closest to natural speech, and unlike the more public "transactional function," whose

purpose is to convey information, expressive language focuses on fluency rather than explicitness or correctness. It is ideally suited to the exploration of ideas and is often the language of the first draft.

In addition, the project drew on research which suggests that learning is an active, ongoing process in which an individual mind makes meaning from experience and that language--both talk and writing--plays an important role in the learning process. In this view, learning is more than the passive acceptance of factual material. Knowledge, it holds, cannot be given; pupils must make it for themselves. Learning is dependent upon students' ability to make connections between new material and their existing understanding. Through talk and writing, and in particular expressive talk and writing, students are able to formulate conceptions and make the connection between new knowledge and what they already know. True learning can occur only when students are able to engage material in a personally meaningful way on the basis of previous experience and make it their own through the use of their own immediate language resource. This view of learning also holds that teachers and students are partners in the learning process and that instructors provide a context for a more genuine kind of learning. They are fellow inquirers rather than evaluators, and they create an environment that encourages the active use of pupils' language in the classroom.

Though a great deal has been written in support of this conception of a new student-teacher relationship in which both are learners and in which a language-rich environment is an integral component of the learning process, the research has

primarily focused on the learning needs of native speakers of English. The purpose of these studies was to examine the applicability of this research on the pedagogical use of expressive speech and writing with native speakers of English to adult, non-native speakers of English across the curriculum and to identify and describe those tutor and student behavoirs and interactions which might have led to the project's statistical findings with regard to the effectiveness of expressive speech and writing as learning tools.

Subject Selection

Initial research occured over a two-year period from September 1982 thru June 1984, and was supported by a grant from the Fund for the Improvement of Postsecondary Education (FIPSE). The subsequent corroberating study (described later) took place throughout 1986-1987.

For the first study, approximately 60 ESL students were eligible annually for project participation. Students were selected from among registrants in those English-language content courses which contained the highest numbers of ESL students registered in Advanced ESL or Basic Composition, a transitional composition course specifically designed for second-language students who have completed the college's ESL sequence but do not yet have the writing skills required for admission into Freshman Composition. From this target population, subjects were randomly selected for treatment on the basis of having a common free period during which a group could be scheduled. Thus selected courses contained both project participants and controls.

Tutor Selection

Tutors played a vital role in the project. They were selected from both within and outside the college based on their knowledge of the content discipline and their proven abilities as writers. While the project subsequently trained tutors to provide a more student-centered, language-rich learning environment, tutors had to enter the project with those personal qualities that enhance tutor effectiveness, such as friendliness, warmth, and a desire to work with and help others. Tutors met as a group for three weeks under the leadership of the project director so that they could experience first-hand the very processes through which they would be guiding students before being assigned their own groups. They continued to meet once a week throughout the semester. Tutors explored topics generated by group interaction or the project director, wrote papers, and often presented final revised versions. In this way they gained awareness of their own composing processes, understood the importance of oral discourse in formulating new ideas, became familiar with the functions of expressive language, and appreciated their work as facilitators of the group learning process. In training sessions, tutors also read and discussed research on second-language acquisition and writing across the curriculum. They were required to maintain logs of each tutoring session and keep journals of their tutoring experience. Tutors thus served as co-researchers and provided valuable data and insights which enriched the study.

Methodology

The study presented here combined both quantitative and

qualitative research methods. One way in which the project sought to measure the effectiveness of expressive language with adult ESL students was to compare the teacher-assigned final grades of ESL project participants to ESL non-participants in the same content class. Because no quantitative data existed to date on the effectiveness of speech and writing as a learning tool with ESL students, this experimental design was viewed as offering a contribution to research in this area. This analysis of teacher grades was also held useful in determining project effectiveness because grades, regardless of how they are derived, provide a realistic picture of how student learning is evaluated in the academic setting and offer students a strong signal as to what constitutes "successful" learning.

Yet useful and important as a comparison of teacher grades may be, such a quantitative analysis was deemed limited. The quantitative data only reflected results and could not identify how those results were obtained. In order to compensate for the inadequacies of a quantitative paradigm, the study incorporated a qualitative dimension in which the researcher collected the kinds of qualitative data which would further enhance understanding of the pedagogical effectiveness of expressive language with adult, advanced and post-ESL students.

In the role of observer, the researcher attended and audio-taped group sessions, took field notes, interviewed tutors and students both formally and informally, asked tutors to maintain session logs and journals, and collected samples of students writing. In order to provide a sense of the

students' performance over time and reveal in detail the processes of instruction as ESL students use talk and writing as learning tools, the study focused on one group, Introduction to Business, led by a tutor, Allison, as it met during the course of the spring semester of 1984. Data were thus obtained through observer attendance at each session of this group and random and sporadic attendance at at least three sessions per semester of groups run by other project tutors.

Findings

Quantitative

The final grades students received in the content courses were used as a basis for measuring the effects the tutoring project had on increasing student comprehension of course material. Each grade (A, B, C, D, or F) was converted into the following numeric system: A=4, B=3, C=2, D=1, and F=0. A further analysis of the difference in performance between the control and experimental groups was done by performing a *t* test. This test enables one to determine whether differences between two sample means are significant and not attributable to chance. The significance level selected was .05. When combining spring and fall semester mean class grades during the academic years 1982-84, it was revealed that students in the tutoring project received a final mean grade of 2.56 in their content courses while control group received a score of 2.02. As hypothesized, students in the tutoring groups performed better than those in the control groups, $t(278)=3.68$; this is statistically

significant at the .05 level. The scores not only suggest a higher degree of learning by project participants but a wide margin of such learning.

Qualitative

In order to amplify and provide a basis for understanding the substantive significance of the statistics gathered earlier, data of a qualitative nature were collected with the objective of identifying illustrative tutor and student behaviors which might have led to the statistical findings. The in-depth study of one tutor-led group and sporadic observation of an additional 15 groups and 8 tutors demonstrated that through the use of speech and writing, adult ESL students of inconsistent and variable English skills can significantly improve their comprehension of subject area disciplines and attain a more genuine understanding of course material. Students and tutors were observed engaging in those behaviors and interactions associated with a student-centered learning model which emphasizes the use of language for learning. Specifically, students were encouraged to paraphrase course material in their own words rather than the teacher's, tutor's, or text's. They were helped to use their own language resources to find a personal connection between new and existing knowledge in order to see the relevance of unfamiliar concepts to what they already knew. Students used both talk and writing as a means of mastering new concepts. The tutor played a less dominant role in the learning process by giving students more responsibility for their own learning and encouraging them to learn from

each other. The learning climate was one which fostered inquiry, risk-taking, and speculation.

The study illustrated the often slow, painstaking learning processes of adult ESL students who often come from educationally, economically, and linguistically deprived environments and demonstrated how these untraditional community college students benefited from a language-rich, student-centered learning model which emphasized the importance of language throughout the curriculum.

CUNY Retention Exemplary Model Project

Corroboration of our findings on the effectiveness of talk and writing with ESL students across the curriculum was achieved through a one year study conducted in 1986-87. Students were registered in Advanced ESL, the final semester of the Hostos ESL sequence, and were enrolled in one of three content courses targeted for the project. These courses, Concepts in Science I, Public Adminitstration, and History of the Caribbean, were selected by Hostos department chairpeople for inclusion in this model program. Students in these courses had tutorial hours blocked into their schedules. Sixty-five students, divided into 7 groups, were served in the fall of 1986.

In the spring of 1987, lower than expected enrollments in the three originally targeted courses enabled us to provide tutoring to ESL students in other content courses as well. Additional student participants were selected from among registrants in those English-language content courses

that contained large numbers of ESL students registered in Advanced ESL or Basic Composition. These content courses encompassed a wide range of liberal arts offerings and included Contemporary Health Issues, Introduction to Sociology, Women in Management, Interpersonal Relations, Early Childhood Education, and General Biology. Students were assigned to groups on the basis of a common free period during which at least three and no more than eight students were able to meet. In the spring of 1987, 99 students, assigned to 14 groups, were served by the project, resulting in a total of 164 project participants for the academic year, 1986-87.

FINDINGS

Quantitative

As in our previous study, the tutoring model had a large positive influence on student learning and performance. For example, 84% of project participants passed their courses as compared with 63% of control group. In addition, 82% of the experimental group received a grade greater than or equal to C as compared with only 56% of the control sample. Thus, a grade of C or better was earned by one-quarter more of the students who received tutoring than by those who did not. Ten percent of the students not receiving tutoring received a final grade of A and 26% received F's. However, 35% of those receiving tutoring earned A's and only 7% failed their courses. Twenty-five percent more A's were received by project participants with a 20% higher failure rate among non-participants. In terms of attrition, of those

students receiving F's because they stopped attending class, 50% more were in control group. When combining fall and spring semester mean class grades during 1986-87, it was revealed that students in the tutoring project received a final mean grade of 3.01 in their content course, while controls received a score of 1.87, a difference of more than one full higher grade.

Qualitative

Ninety-seven percent of participants agreed that the tutoring improved their comprehension of course material. Ninety-five percent indicated they felt comfortable expressing their opinions in group discussions, and 84% stated they participated more in the tutoring group than in class. These assessments were corroborated by tutor observations.

Faculty were unanimous in their evaluation of the tutoring program as highly successful, and 100% noted improvment in student comprehension of course material.

Conclusions

The studies determined that adult, advance and post-ESL students who participated in tutor-led groups focused on a particular content course in which talk and writing were used as aids to learning, received higher course grades than non-participating ESL students in the same class.

Significantly, the studies demonstrated the primacy of talk in the learning process for ESL students. While the initial study was conceived as one which would emphasize

"writing across the curriculum," it soon became apparent that for ESL students expressive talk is an equal, if not greater, contributor to student learning. Participants stated that when they were able to talk freely, away from an atmosphere of grammatical criticism, they were able to "understand more clearly" the meanings of spoken and written words. Indeed, articulating material orally was often required before any true understanding could occur and before any writing, even expressive, could be generated. This was especially true in courses laden with technical terminology.

The studies also reveal the difficulties ESL students have with ordinary, everyday words such as "seek", "traditional," "absorb," "management," or "coerce." Yet most classroom instructors were unaware of ESL student problems with this kind of vocabulary. The findings suggest that educators continually check for student understanding of vocabulary presented either through lecture or text.

Overall, the studies illustrate the ineffectiveness of the lecture mode as an instructional tool with the population studied here. Unable to quickly grasp the meanings of the words presented, these students could not paraphrase a lecture and take helpful notes. Their class notes were often incomplete or even non-existent. Some students, unable to discern the important from the trivial or synthesize and paraphrase material in their own words, attempted the impossible task of writing down every word spoken by the instructor. Spelling errors were frequently not recognized as such, leading to even greater confusion.

What the studies amply demonstrate is that principals of writing across the curriculum, and indeed language across the curriculum, are relevant and applicable to ESL students in content courses. ESL students, like their native-speaking counterparts, can benefit from a learning model which is student-centered and stresses language for learning. It appears that their success in English-language content classes is reliant on the development of new pedigogical approaches. Our research points to the value of the learning model study here, and we encourage its further replication.

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